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09/612,598	07/07/2000	David A. Farber	PM 270531	7930

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EXAMINER

GECKIL, MEHMET B

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 10/29/2003

48

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/612,598

Applicant(s)

FARBER ET AL.

Examiner

Mehmet B. Geckil

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-- Th MAILING DATE of this communication app ars on the cover sheet with the correspondenc address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41,45,49,50,53-63,65,66 and 69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41,45,49,50,53-63,65,66 and 69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

1. Claims 41, 45, 49-50, 53-63, 65-66 and 69 are presented for examination.
2. The following is a quotation of the CFR § 1.71:
 - a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

The specification is objected to under CFR § 1.71, as failing to provide an adequate written description of the invention and failing to adequately teach how to make and use the invention, i.e. failing to provide an enabling disclosure.

Present claims were copied from the Patent No: 6,108,703 ("703" patent from herein on) in order to provoke an interference. Applicant in the response amended the claims to read on the first level and second level name servers language from the claims thus acknowledging that their architecture was different and did not support the copied claims. However, in the response applicant kept some of the broad method claims. These method claims were drafted to operate on the copied architecture, i.e. with the first level and second level name servers and applicant's architecture is different and thus enablement problem still exists with respect to these method claims. Examiner will summarily explain the two architectures in order to show how they operate differently. Applicant's system is the one having a reflector as described in the specification. The reflector includes some scripts to intercept the client request for a resource coming to a destination or origin server and then decides whether to serve the request locally or

redirect to another mirror site or repeater site. If the script decides that the request for a resource should be redirected to another mirror site then the URL addresses of requested resources are modified to point to the mirror or repeater site. So, the main action is concentrated on the reflector as shown on figure 1 element 108.

The architecture described in the "703" patent is entirely different. The client request coming to a destination or origin server is send to a first level domain name server for resolving the domain name to an IP number of a machine which would serve the request. The first level domain name server was modified to perform additional functions like determining where in the network a user is located (see column 9 line 33 et seq of "703" patent) so that the request is redirected to a second level domain name server wherein the second level domain name server would select an appropriate server which would server the request repeater (see "703" patent, column 10 lines 54-61.) Just from this much of information it is crystal clear that the two architectures are radically different. Further expanding on this we would see that the first level domain name server is prepended (attached in front of the domain name designation), e.g. ns1.geckil.com wherein the ns1 is the well known shorthand writing for the name server. The second level domain name server was further prepended or attached in front of the ns1.geckil.com thus creating the following address: ns2.ns1.geckil.com wherein the ns1 and ns2 are different host machines in a network. This is well explained in column 9 line 8 et seq with letters using xxxx and yy to designate first and second level domain name servers respectively. "703" patent specifically emphasizes in column 9 line 33 et seq that top level or first level DNS servers are different from the regular DNS servers. This is the key to the understanding of the differences between the two architectures. In "703" architecture all the control routines which

will direct the client request to another low level DNS server according to the user's location in the network is incorporated into the top level DNS server code. Alternately, in the applicant's invention there are scripts comprising the reflector in addition to the DNS servers. So DNS servers and the reflector are different entities and thus have different level of design and complexity. As it is demonstrated hereinabove the two architectures are radically different and method claims are drafted according to the "703" patent and thus they do not operate the same way on the applicants architecture and thus they are not enabled.

Alternately, in applicant's invention this feature of determining where the user is located in the network is done not in the DNS but by the reflector mechanism (see applicant's specification, column 3 line 2 et seq.) This is completely different from the applicant's invention described in the application. Thus, there was no reasonable justification to copy the claims from the "703" patent.

Applicant in this application borrowed language by copying claims. There is no support in the specification for the borrowed language, i.e., the "framework" does not exist in the specification and claims recite the framework. Applicant just deleted the word "framework" from claim 41 but rest of the claims still include the word "framework". Therefore, it would take undue experimentations for one of ordinary skill in the networking art at the time of the invention to figure out the details of the framework. Also, claims 53, 61, and 62 recite, e.g., "managed by a domain other than an origin server domain" or a variation of this language, e.g., second domain, or the like. There is no support in the specification for this language. The word "domain" mentioned in three occasions in the specification. And these occasions are not giving

any kind of meaning as the claimed language as explained hereinabove. Thus, it would take further undue experimentations for one of ordinary skill in the networking art at the time of the invention to figure out the details of the claimed language regarding the domain other than the origin server domain or the like as explained hereinabove.

Moreover, applicant uses a plurality of versions of the word “objects” in various claims, e.g. “page objects”, and “embedded objects”, Applicant should point out exactly where in the specification there is support for these phrases. Furthermore, with the ongoing problems with the copied language from the “703” patent, applicant should point out where in the specification is the support for all the languages for all outstanding claims. For example, some claims recite, “modifying at least some of the embedded objects of the page” or the like, e.g., see claims 53, 61, 65 and 69. This is totally erroneous. The embedded object URLs are modified and not the embedded objects themselves as it is quoted hereinabove from the claim. Also, the following phrases found in the claims are not supported by the specification:

- 1) “different resource locator” or “resource locator” claim 62;
- 2) “designate the repeater server network” claim 57 (it designates the individual server within the repeater network and not the repeater server network. Applicant should note this point for all the claims which recites such feature, i.e., to designate a repeater server within whatever comes after this phrase, e.g., see claim 41);
- 3) the steps a-d of claim 49 is not in sink with the operations described by the specification. The step of identifying is done in the repeater server selector (e.g. as in claim 41) and not in the language recited in steps c-d of the claim 49 and in claim 54; and

4. claim 41 last paragraph recites that the web page including the modified embedded object URL is served from the first server and the embedded object identified by the modified object URL is served from a given one of the repeater servers as identified by the repeater selector mechanism. Normally this is accomplished by the redirection sent from the repeater server to the client browser so that the client browser fetches these from the repeater servers. But this language skips this detail so that it reads for example the redirector sending a message directly to the repeater server and the repeater server supplying the embedded objects to the client but this is not supported by the disclosure.

In view of all the ongoing problems with the copied language from the “703” patent, applicant should point out where in the specification is the support for all the languages for all outstanding claims.

It would have been obvious to one of ordinary skill in the networking art at the time of the invention that the system described and claimed in “703” patent is different than the system described in the applicant’s specification as demonstrated hereinabove and copied claims do not have proper support in the applicant’s specification. Therefore, it would take multiplicity of undue experimentations for one of ordinary skill in the networking art at the time of the invention to figure out the details of all the problems listed hereinabove and the how the method claims would function without the modified DNSs as described in the “703” patent. Again, broader method claims would not function as claimed because the underlying DNS structure is

different and thus there is no support for them as explained above and they depend on the DNSs for properly functioning.

The examiner contends that it would require multiple undue experimentations for one of ordinary skill in the networking art to make and use the claimed invention for the reasons set forth hereinabove. Applicant is reminded that no new matter is allowed in the amendment to the specification under 35 U.S.C. 132 and 37 CFR 1.118(a).

3. Claims 41, 45, 49-50, 53-63, 65-66 and 69 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

4. Claims 41, 45, 49-50, 53-63, 65-66 and 69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Elements in the preamble should be properly linked to the elements of the body. The heart of their invention is the two parts of a requested html page from the origin server, e.g., a base html page and the embedded object links which exist in the body of the base html page wherein the links or URLs of the embedded objects are rewritten in the base html page and the rewritten base html page is sent back to the requesting client. This heart of the invention should be reflected in each independent claim and elements in the body of the claims should be properly linked to this information in the preambles of the claims. Also claim 41 last paragraph recites that the web page including the modified embedded object URL is served from the first server and the embedded object identified by the modified

object URL is served from a given one of the repeater servers as identified by the repeater selector mechanism. Normally this is accomplished by the redirection sent from the repeater server to the client browser so that the client browser fetches these from the repeater servers. But this language skips this detail so that it reads for example the redirector sending a message directly to the repeater servers and the repeater servers supplying the embedded objects to the client but this is not supported by the disclosure (see the first paragraph rejection hereinabove.)

5. Claims 49-50, 53-54, 57-59, 62, 65-66 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graber et al.

Graber et al (5,712,979) taught the invention substantially as claimed including a distributed hosting framework operative in a computer network in which users of client machines or user stations connect to a first server (col 11 line 61 et seq, e.g., 122a), the framework comprising:

- a) a routine for modifying at least one embedded object URL or link of a web page to designate a repeater server instead of the origin server (col 10 lines 57-68 and col 11 line 30 et seq);
- b) a second server, e.g. OLS site, distinct from the first server, e.g. 122a, for hosting some of the embedded objects of web pages (cols 10-11);
- c) wherein in response to requests for the web page, generated by the client machines, the web page including the modified embedded object URL is served from the first server (col 12 line 35 et seq and col 13 line 1 et seq) and the embedded object identified by the modified embedded object URL is served from a given one of the second servers (e.g. see column 12 lines 65-67, and col 13 line 9 et seq, e.g. external links appended.)

6. It would have been obvious to one of ordinary skill in the networking art at the time of the invention that the claimed invention differed from the teachings of Grabber et al only by a degree, e.g. in the wording of a set of repeater servers but from a broad interpretation of the claims, even taught Grabber et al did not say that OLS servers were repeater servers, examiner interprets them as equivalent to the repeater servers because they store some of the web pages and serve them to the user. The heart of the invention, e.g., modifying embedded object URLs and inserting the modified embedded object URLs into the web page and then returning this page to the user so that these embedded objects or links can be fetched from the destinations servers where the modified embedded URL points to are all taught by Grabber et al (see for example column 13 line 9 et seq for external URL links being appended and col 14 line 2 et seq for the destination page which includes the URLs having the appended codes being passed to the user and the user executing or fetching these links by clicking on the links which is no more than a difference in scope.) Other features are all obvious variations of the well known features of the Internet art. Moreover, even though Grabber et al did not mention about using fault tolerance, e.g. replication or the like., these are well known features of the computer art for decades. Every system manager's first duty is to set up a backup system for recovery from the system disasters. Applicant's replication is an obvious variations of the well known features of the networking art, e.g. for example caching requested copies in local cache stores is taught for a long time in the Internet, e.g. Squid caching is well known. Moreover, as to the claims which recites using markup languages or tags, these features are inherent features of the www and Grabber et al taught using markup languages and tags see table II. As to claims reciting redirecting from one domain to another domain, Grabber et al system exactly did that, e.g. ,see figure 1 element 122a

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or first server is a domain www.cml.com and element 128 or the second server is also another domain www.ols.com and the first domain redirected requests to the second domain as explained hereinabove.

7. Claims 55,56, 60,61, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graber et al in view of Bonnaure et al.

Graber et al teachings are incorporated by reference as set forth hereinabove. Serving the requested pages from servers close to the user is known in the art as network geographical data, e.g., see Bonnaure et al (5,862,339), column 12-13, especially column 12 lines 39-68 and column 13 lines 1-34. Network geographical data comprises the network map as claimed in claim 45. It would have been obvious to one of ordinary skill in the networking art at the time of the invention to combine the teachings of Graber et al and Bonnaure et al to provide increased performance based networking system based on the user's location information.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. Claims 51, 57-59, and 62 are rejected under 35 U.S.C. 102 (e) as being clearly anticipated by Grabber et al (5,812,769).

10. Grabber et al taught the invention as claimed including all the claimed limitations (see figures 1 and 5-6, and columns 5, and 11-12. Grabber et al system modified and appended the URL links into the requested page and sent the page with the appended links so that the user will select one of the embedded or appended object URL to fetch the desired object from the destination server identified by the link URL (see column 12 line 45 et seq. Claims do not recite any automatically fetching of the embedded objects pointed by the appended URL. Thus, in the Grabber et al system user selects the modified appended URL link by clicking on the link and the embedded object is resolved and the object is received from the identified destination server. This operation of the Grabber et al system reads on these claims because of the broad recitation of the claim language.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 41, 45, 49-50, 53-63, 65-66 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al.

13. Martin et al (5,867,706) taught the invention substantially as claimed including a system and method of serving pages requested from an origin server either directly from the origin server or from a plurality of repeater servers or mirrors of the origin server that are distinct from the origin server wherein the requested pages include a base html page and a plurality of

embedded object URLs within the base html page and wherein the embedded object URLs of the base html page are rewritten or modified to point to either to the origin server or to one of the distinct repeater servers (see column 4, line 4 et seq, e.g. the “example.htm” being equivalent to the base html page, and see col 4, line 41 et seq for the browser automatically requesting the embedded images from the server when it is downloading the base page from the server, e.g., see col 4, lines 54-55 and line 59 as well as col 5, line 45 for the explicit recitation of the “base page”, and e.g. see col 6, line 18 et seq for modifying the information in the body of the base html page so that the following requests for the embedded object URLs will resolve to the one of the other repeater processors or servers.) Martin et al teachings differed from the claimed invention only by a degree, e.g., in the processors verses the claimed repeaters. But it would have been obvious to one of ordinary skill in the networking art at the time of the invention that given different processors performed the same function as the repeater servers because they executed and the served the objects pointed by the modified object URLs. Other claimed features are all obvious variations of the well known features of replication, mirroring, and fine grain load balancing art.

14 Claims 41, 45, 49-50, 53-63, 65-66 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al in view of Lowery et al.

15 Chow et al (6,029,175) taught the invention substantially as claimed including altering or translating embedded object URLs to cause subsequent resource requests for the associated resources to be directed to the Revision Manager (see col 5, line 1 et seq; col 6, line 16 et seq;

col 14, line 21 et seq; and col 15, line 23 et seq.) It would have been obvious to one of ordinary skill in the networking art at the time of the invention that altering or translating embedded object URLs would depend on the system requirements, e.g. in the case of mirroring systems embedded object URLs would be translated to point to the repeater servers or mirrors or replicas instead of the Revision Manager. The idea of translating the embedded object URLs is the heart of the matter and it was taught by Chow et al much earlier than the applicant. Lowery et al (5,894,554) taught redirecting the client requests to replicated page servers through the dispatcher. Dispatcher is analogous to the Revision Manager of Chow et al but further it redirects to one of the plurality of page servers (see Figure 4, col 4, line 42 et seq; col 5, line 2 et seq; and col 6, line 40 et seq.) It would have been obvious to one of ordinary skill in the networking art at the time of the invention to combine the teachings of Chow et al and Lowery et al in order to extend the usability of the Chow system beyond local processors to replicated servers and increase the load balancing features. Other claimed features are all obvious variations of the well known features of replication, mirroring, and fine grain load balancing art.

16 Claims 41, 45, 49-50, 53-63, 65-66 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowery et al in view of Anonymizer.

17. Lowery et al (5,894,554) taught redirecting the client requests to replicated page servers through the dispatcher (see Figure 4, col 4, line 42 et seq; col 5, line 2 et seq; and col 6, line 40 et seq.) Anonymizer taught modifying the client request by prepending a host name to the domain name so that the requests will resolve to the prepended host of the Anonymizer domain.

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Anonymizer accomplishes this by modifying all the addresses of the embedded objects or other links of the base page so that the base page is served from the host of the Anonymizer domain and all the other embedded objects are served from their respected modified server including the target address specified by the client to the Anonymizer host. It would have been obvious to one of ordinary skill in the networking art at the time of the invention to combine the teachings of Lowery et al and Anonymizer teachings in order to extend the usability of the Lowery et al system to replicated servers.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehmet Geckil whose telephone number is (703) 305-9676. The examiner can normally be reached on Monday through Friday from 6:30 A.M. to 3:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor David Wiley, can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are listed hereinbelow.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800/4700. Customer service number is (703) 306-5631.

Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 746-7238 (for AFTER FINAL communications);

Or:

(703) 746-7239 (BEFORE FINAL Official communications intended for entry)

Or:

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(703) 746-7240 (for status inquiry or informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA., Fourth Floor (Receptionist).

10/14/03

A handwritten signature in black ink, appearing to read "Mehmet Geckil", with a stylized flourish at the end.

MEHMET B. GECKIL
PRIMARY EXAMINER